

Environmental and Behavioral Economics - Applications to China

av

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AKADEMISK AVHANDLING

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Abstract

Paper 1: “The Effects of an Environmental Policy on Consumers – Lessons from the Chinese Plastic Bag Regulation.” To reduce plastic bag litter, China introduced a nationwide regulation requiring all retailers to charge for plastic shopping bags on June 1, 2008. By using the policy implementation as a natural experiment and collecting individual-level data before and after the implementation, we investigate the impacts of the regulation on consumers’ bag use. We find that the regulation implementation caused a 49% reduction in the use of new bags. Besides regulation enforcement, consumers’ attitude toward the regulation and some consumers’ socioeconomic characteristics also affected bag consumption. However, the regulation effects differ largely among consumer groups and among regions and shopping occasions.

Paper 2: “Can Stated Preference Methods Accurately Predict Responses to Environmental Policies? The Case of a Plastic Bag Regulation in China” investigates the validity of using stated preference (SP) estimates to predict policy effects on plastic bag consumption. Before implementation of a plastic bag regulation, when bags were still free of charge, we utilized an SP survey to elicit consumers’ contingent bag consumption in certain possible pricing scenarios. Following implementation of the regulation mandating charging for bags, we conducted another survey to collect actual consumption information. We thus have unique data to compare stated and revealed consumption. The comparison results show that consumers’ behavioral reactions to a policy change can be predicted reasonably well with SP techniques.

Paper 3: “Household Decision-making in Rural China: Using Experiments to Estimate the Influence of Spouses.” Many economic decisions are made jointly within households. This raises the question about spouses’ relative influence on joint decisions and the determinants of relative influence. Using a controlled experiment (on inter-temporal choice) we let each spouse make first individual decisions and then joint decisions with the other spouse. We use a random parameter model to measure the relative influence of spouses on joint decisions. In general, husbands have a stronger influence than wives. However, in richer household and when the wife is older than the husband, we find a significantly stronger influence of the wife on joint decisions.

Paper 4: “Easy Come, Easy Go – The Role of Windfall Money in Lab and Field Experiments” investigates the influence of windfall and earned endowment on behavior by conducting a dictator game, where the recipient is a charity organization, in exactly the same way in the laboratory and in the field. We find subjects donate more in both environments if the endowment is a windfall gain. Thus, windfall money is important not only in a lab environment. However, even for earned endowment, there is a significant difference in behavior between the lab and the field. Although the experimental design was intended to control for all other effects except environment, we still find differences. This points to the importance of discussing the environment when interpreting both laboratory and field experiment results as well as of conducting replication studies.

Paper 5: “Windfall vs. Earned Money in the Laboratory: Do They Affect the Behavior of Men and Women Differently?” experimentally investigates how windfall and earned endowments affect behavior differently between genders using a dictator game. In line with previous studies, we find that windfall endowments significantly increase the amount donated. The impact of moving from earned to windfall endowment on behavior is larger for females, yet the gender difference is statistically insignificant. Thus, we do not find evidence that the change in how the endowment is obtained in a laboratory experiment affects male and female behavior differently.

Key words: charitable giving; China; contingent behavior; dictator game; experiment; earned endowment; external validity; field experiment; gender; household decision-making; laboratory experiment; litter; market-based policy; natural experiment; plastic bags; random parameter model; relative influence; revealed behavior; spouses; stated preference; time preferences; windfall money

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